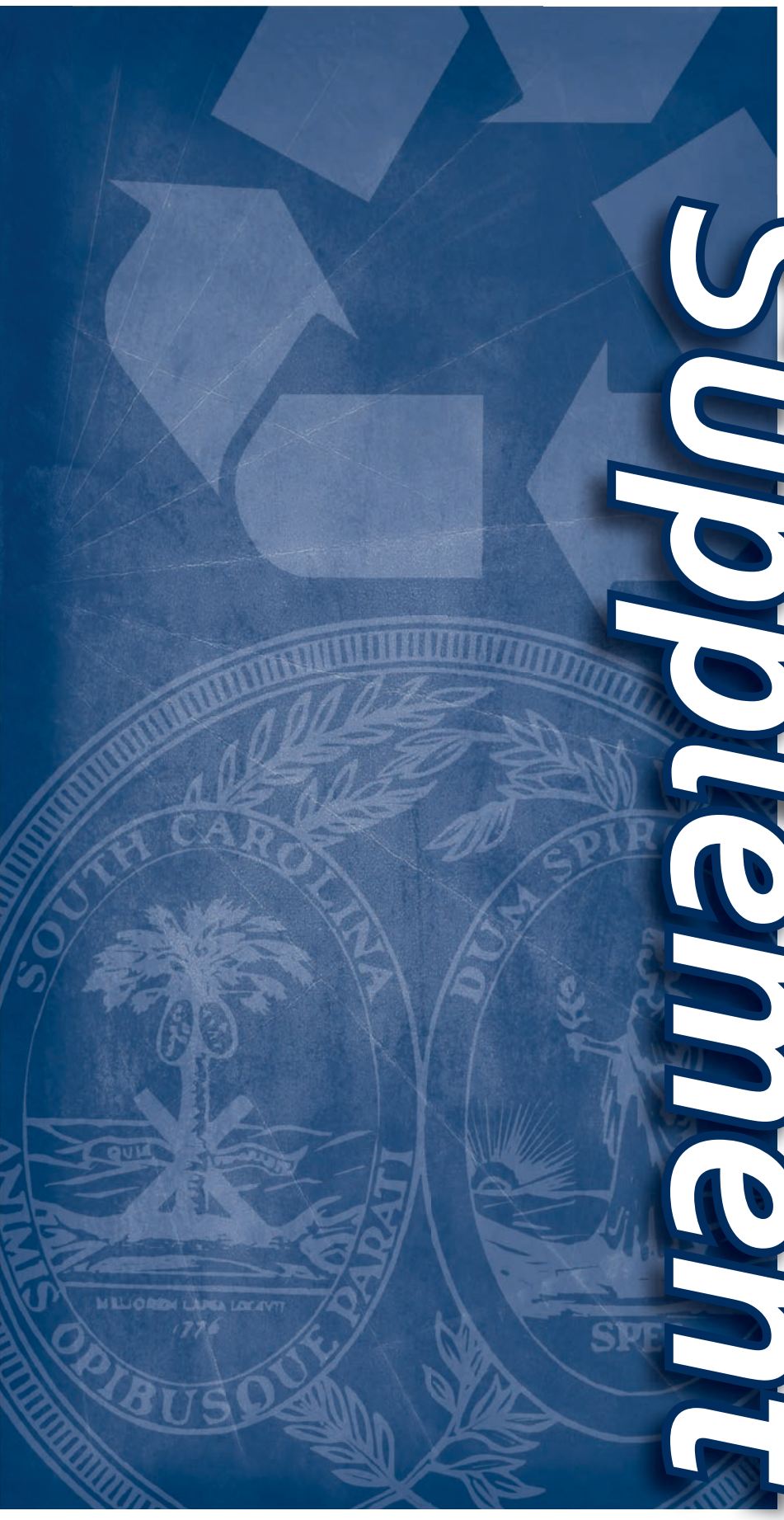


S.C. State Agency Recycling Professionals Certification

Procurement Supplement



S.C. State Agency Recycling Professionals Certification Procurement Supplement

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About the Manual

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Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Effective Contracting & Marketing

CHAPTER 1

What is effective contracting?

Effective contracting is using a competitive process for a good or service, which ensures that the needs of the agency and the service provider(s) involved are met. This occurs through a contractual arrangement with a qualified service provider at a cost-competitive rate through a mutually beneficial agreement. In most cases the competitive process is initiated by the state agency by issuing a Request for Proposal (RFP). The RFP – an invitation for potential suppliers to submit proposals offering a specific product or service – must be carefully developed to secure the desired product or service.

Seven Steps to Effective Contracting

The following steps will help to ensure an effective procurement and contracting process.

- 1. Precisely define services to be contracted.**
The complete geographic area, population, number of points of generation and number of points of collection must be defined for potential service providers. The complete range of services desired – the nature and type (e.g. collection, processing, transportation, marketing of material, communication, education, program administration, operation) – also must be specified in a clear manner. The duration of the contract should be designed to reflect both the needs of the state agency and the realistic capabilities of the potential bidders. For contracts involving the purchase of equipment, contracts should match the life cycle of the equipment being purchased. If the contract is too short, the contractor must capitalize the equipment over the period of the contract resulting in sub-optimal pricing and cost. If the contract exceeds the equipment lifespan by a year or more, the contractor will incur expensive extended maintenance or costly new equipment that must be built in to the price. Current life-cycle expectations for new collection trucks are about seven years and new material recovery facility (MRF) equipment is 10 to 15 years.
- 2. Determine contractor pool and market position.** The state agency must determine whether their location is large enough that it has bargaining power. Good results are more likely to come from a minimum of three to five bidders. In some areas, bargaining power

may be improved by bundling services or partnering with other state agencies or public entities to increase the attractiveness of potential business. With respect to recycling collection and processing, the leading practice is to structure the procurement process to allow for separate contracting for these services. With this approach, it is best to focus on processing before collection or to specify a MRF location so potential collection service providers will know the location of the MRF and can structure their proposals/bids accordingly. Obtaining separate prices for collection and processing, even if under one contract, is preferred. Also, if additional material is to be added during the course of the contract, address whether/how that will affect cost in the RFP/contract.

- 3. Prepare a detailed, unambiguous RFP or Request for Bids (RFB) or Quotes (RFQ).** The agency will have to decide whether the services requested warrant an RFP, RFB or RFQ. An RFQ is essentially the same as an RFB. RFBs and RFQs work best when services are already defined, all bidders are qualified and price is the sole deciding factor. Such a bid may be used when installing fencing at recycling point-of-collection sites.
- 4. Employ a fair and transparent contractor selection process.** To make sure all potentially qualified companies have the opportunity to respond, and to

Establishing Terms That Are Mutually Beneficial

A contract should result in the state agency entering into an agreement with a qualified hauler that provides specified services at a price that represents a good value relative to that offered by competitors. There may be some trade offs with quality. Ideally, contract specifications will:

- **Clearly define acceptable levels of service;**
- **Encourage the MRF and/or hauler to maximize revenue from the sale of recyclables;**
- **Encourage higher material recovery rates;**
- **Yield material of high, marketable quality; and**
- **Enhance working relationships with service providers.**

avoid challenges to the RFP, the state agency must use a fair, transparent and defensible contractor selection process. Follow agency procurement guidelines, but try to elicit interest from as many potential service providers as possible. In order to learn about the capabilities and interests of potential contractors in advance, consider prequalifying bidders through either an RFQ in advance of the RFP or through a pre-proposal/bid meeting with potential contractors. During proposal and bid development, have a clear and easy process for potential contractors to ask questions and access answers. Lastly, clearly describe the evaluation criteria to ensure that contractors who are not qualified don't spend time developing a proposal and that bidders who respond to the RFP provide all requested information. Always require and verify references.

5. **Negotiate a partnership-oriented contract. In developing the contract, build upon the terms and conditions specified in the RFB/RFP.** Incorporate

incentives for improving performance on the part of the contractor. Allow flexibility for amending the scope of work to address changing circumstances including unexpected events such as adding new commodities to the program.

6. **Consider opportunities to build risk-sharing into the contract.** For example, consider index-based monthly fuel adjustments and/or index-based annual payment escalation to accommodate future price fluctuations in an equitable manner. By doing so, the bidder will not have to inflate the cost of the proposal to cover a potentially risky cost scenario.
7. **Manage compliance yet maintain a partnership approach in contract administration and monitoring through the entire contract term.** It is important to assess contract compliance, but approach issues that might arise immediately and in a spirit of wanting to resolve them in a productive manner. Monitoring compliance on a continuous basis can prevent small issues from escalating. The contract manager also should identify ways in which the contract terms may need to be adjusted in the future.

Procurement & Contracting Goals

The goals of state agency procurement and contracting are to:

- **Secure the desired service from competent private-sector contractors at the lowest possible cost; and**
- **Create an effective working partnership between contracting entities.**

The U.S. Environmental Protection Agency (EPA) has coined the term "resource management," which compensates haulers based on their ability to help the community achieve their material management goals. Resource Management essentially aligns waste contractor incentives with the agency's goals to encourage innovative approaches that foster cost-effective resource efficiency through prevention, recycling and recovery. For example, the contract should provide a financial incentive for raising recycling rates over a specified level.

For bundled service in which the hauler provides the garbage and recycling collection, it is important to set a service fee that allows the hauler to cover their collection costs. If the quantity of garbage collected decreases as a result of increased diversion, the hauler should not be penalized.

Visit www.epa.gov/smm for more on Sustainable Materials Management.

Material Recovery & Markets

The marketing of recovered material is one of the most critical factors in the success of any recycling program. The cost to bring a material to market and the revenue realized from the sale of material directly affect the net cost of the entire recycling system even in programs where the marketing is done through a contract and the recycling coordinator may not directly participate. The available markets for a material and potential market revenue are important criteria that agency recycling coordinators should use to target material for recycling.

Generally, a recycling coordinator's goals related to material marketing are to:

- **Direct recovered material into value-added end uses;**
- **Mitigate risk by maximizing and sharing in the revenue received for marketed material;**
- **Understand emerging trends and issues in the recovered material marketplace and interpret their effect on the program;**
- **Evaluate the ability of the marketplace to absorb additional types and/or quantities of material being considered for recovery; and**
- **Increase quality and quantity of recovered material, as possible.**

Attracting Potential Bidders

The result of an effective procurement process is competition among several potential bidders for the contract or franchise. If only one or two companies bid, it may be necessary to re-examine the RFP to discover why more bidders did not respond. Examples are provided below.

- **Are the services being solicited difficult or overly onerous for service providers to perform (e.g., impassable roads, difficult-to-access sites)?** Insisting that haulers provide services that are difficult to perform or that could jeopardize their equipment will result in fewer bids and/or more costly bids. It can be helpful to speak with haulers about agreeable compromises before the RFP/RFB is developed. Some agencies have worked with haulers to make concessions for such conditions. Also, ensure that data being requested is actually possible to obtain, allow some flexibility in how it is provided and be sure data requested will be used.
- **Are equipment specifications overly burdensome (e.g., a dedicated fleet or expensive equipment)?** If you know the equipment used by haulers

Components of a Good RFP & Contract

Below are some components of a well-thought-out contract. Some specifications apply only to collection or MRF operations.

- **Clearly defined terms**
- **Service(s) to be provided**
 - Services (e.g., recyclables, yard trimming, garbage)
 - Same-day service
- **Days of collection, start/end times**
- **Holidays**
- **Manner of collection**
 - Obey traffic laws
 - Provide maps/routes – written permission to change
 - No littering
 - Restrictions on weight, size, etc.
 - Return bins/carts
 - Keep material streams separate
- **Facility or MRF where material is to be delivered** (and how payment is made for delivery – e.g., who pays processing fee, is it included in bid price?)
- **Adequate background information and data**
- **Clear expectations regarding qualifications and experience**
- **Detailed performance specifications addressing the following factors**
 - Location (for MRF) and collection areas
 - Regulatory compliance
 - Recyclables accepted (initial and provisions for the future)
 - Markets for processed material (for MRF)
 - Capacity (for MRF)
 - Vehicle access, operating hours, weighing, recordkeeping and reporting (for MRF)
 - Residue management and limits (for MRF)
 - Start-up schedule/contract start date
 - Handling of complaints (how information is conveyed between parties)
 - Billing responsibilities
 - Communication systems
 - Recordkeeping and reporting requirements (for agency)
 - Training and public education (if included)
- **Vehicle requirements**
 - Type of collection
 - Number of spare vehicles
- **Container requirements**
 - Ownership
 - Replacement
 - Sizes/options for replacement
 - Who distributes initially
 - Who is responsible for maintenance/repairs
 - Cleaning/painting requirements – if dumpsters, compactor service is included
- **Public education requirements** (e.g., distribution of literature, tags for improper setouts, signs on vehicle, rebate to the state agency to cover the cost of education)
- **Personnel requirements**
 - Training
 - Uniform with company name
 - Valid license
 - Level of supervision
 - Regular safety training
 - Staffing level (e.g., per vehicle)
- **Ownership of recyclables**
- **Incentives for increasing performance** (e.g., resource management contract)
- **Penalties for poor performance/liquidated damages**
- **Contingencies for natural/man-made disasters**
- **Opportunities for amending scope to address changing circumstances** (e.g., good faith negotiations, future plans)
- **Performance security** (e.g., security bond, letter of credit requirements)
- **Avenues for resolving disagreements** (e.g., mandatory third-party mediation clause)
- **Points of contact**
- **Clear financial/cost proposal instructions**
- **Price escalators/adjustments** (e.g., when assessed, what it is based on – Consumer Price Index, fuel index)
- **Default/termination** (clearly define process)
- **Replacement of defaulted contractor** (e.g., performance bond, others have right of first refusal)
- **Terms of agreement** (e.g., five years with optional one-year renewals)
- **Insurance requirements** (e.g., liability, worker's compensation)
- **Change of law, amendments and waivers**
- **Assignment** (vendor is still responsible, agency must approve subcontractors)
- **Description of selection process**

before issuing an RFP/RFB, you can have a better understanding of what is realistic. It may be beneficial to identify a level of service desired without specifying the type of equipment to be used or issue the RFP requesting pricing options with current technology and using a new, different technology. Hauler interviews can elicit additional information regarding barriers to using new collection equipment/technologies and may result in some win-win compromises.

- **Can the volume of business be expanded through bundling of services, thereby making the contract more attractive?** Smaller agencies in particular may

Definitions

MRF refers to a **MATERIAL RECOVERY FACILITY** or a facility where mixed recyclables are sorted and prepared for market. Typically MRFs use a combination of manual and mechanical sorting, and bale material so that greater quantities can fit on a truckload. This is a common industry term, but is not a legal definition.

In the S.C. Solid Waste Policy and Management Act of 1991 (Act), MRFs are referred to as "RMPFs" which stands for **RECOVERED MATERIAL PROCESSING FACILITY**.

Recycling Services Offered

The S.C. Department of Corrections collects recyclables from state agencies and colleges/universities as well as schools in Lexington and Richland counties. Participants see a significant reduction in the amount of material going to the landfill and as such may be able to reduce disposal costs. There is a fee for this service and participating programs need to provide recycling containers. For more information, call (803) 896-2364.



not have much leverage in the marketplace to attract service providers, especially if they do not operate in the geographic region. Alternatively, can contracting opportunities be apportioned to provide means by which small as well as large service providers can bid on services to be provided and/or more than one contractor can be engaged to provide service? Economies of scale are gained by having one hauler service a specified area, however, the downside is that other haulers lose business and long-term competition may suffer. If the agency is large enough, it may make sense to divide the services amongst different haulers.

- **Is too much risk being placed on the service provider?** Sharing risk can result in less costly fees as the processor or hauler does not have to "plan for the worst" possible commodity pricing outcome, for example, if some price-driven flexibility is built into the contract. Another example is to include fuel price escalators in the contract so that increases in the price of fuel are not strictly borne by the hauler.

Got markets?

Many different markets and marketing arrangements are available to state agencies depending on the priorities of the agency, local resources and actual or perceived barriers to certain market options. It is beneficial for agency recycling coordinators to be familiar with the final markets available for collected material.

In order to identify markets for recovered material, recycling coordinators can:

- **Check with other agencies nearby to see which markets they use;**
- **Survey local MRFs and waste haulers to determine which recovered material they accept; and**
- **Check the market resources available from both the S.C. Department of Health and Environmental Control's (DHEC) Office of Solid Waste Reduction and Recycling (Office) and the S.C. Department of Commerce's Recycling Market Development Program.** (See the Reference and Resources section of this chapter for links.)

The different types of potential end markets for recovered material from state agency programs are discussed beginning on the following page.



Private Haulers

State agencies may contract with a private hauler to collect recyclables and deliver the collected material to a MRF or other processor. It is then processed to meet market specifications and sold to end users that use the material as feedstock in the manufacturing of new products.

While the ownership of the material typically passes to the hauler, it is still in the state agency's best interest to ensure that the material is being marketed and sold. Some hauling companies also own MRFs, while others rely on MRFs owned by a separate company or government entity to process the collected recyclables.

Private MRFs

Several companies in North America specialize in providing recycling processing services under contract, but do not provide hauling services. Typically, a private processor will establish a MRF by contracting with one or more local governments to accept recyclables that are under their control, whether collected by local government crews or private haulers. Having a commitment for a certain amount of material helps the company secure funding to

construct the MRF. The capital to develop the MRF can be provided by a private operator or a local government(s). Strong markets like state agencies are essential to the success of private MRFs.

A processing fee may be charged to cover some costs of operating the MRF and/or the processor may cover costs, in part or in whole, with revenue from the sale of recyclables. MRFs are more likely to charge processing fees when market prices are low, when recyclables are commingled and when revenue from the sale of recyclables is shared with suppliers.

Publicly Owned MRFs

Some local governments or groups of local governments (regions) own MRFs. Some facilities are operated by the local government or region (sometimes as an authority) while others have contracted operators that have experience operating such facilities and marketing material. Larger regional MRFs may have access to an expanded array of end markets both regionally and globally. This may result in the ability to collect a broader range of recyclables in more stable markets. State agencies can sometimes form cooperative arrangements with local



Pictured above is the interior of Horry County's materials recovery facility – an example of a publicly owned MRF.

governments to combine volumes which may be less costly than contracting with a private MRF.

Private Dealers

Private material dealers are the original backbone of the recycling industry. These companies specialize in one or more types of recovered material, usually paper or metals, and may agree to accept and process other material in return for receiving all of the targeted material generated by state agencies. A benefit of using a dealer is that they usually have significant market experience with their specific material. An example of a private dealer is Sonoco Recycling, which began as a company focused on sourcing paper to manufacture paper products. There also are many scrap metal dealers located throughout South Carolina.

Brokers

Brokers arrange for the marketing of processed material to the end market or intermediary processor on behalf of either the state agency or the processor, but do not own facilities or take actual possession of the material. Brokers usually charge a fee for their services in the form of a percentage of the total value of the sale. Brokers usually work for the end user and guarantee that end user a certain tonnage. The broker then works with many sources of the material in order to supply the tonnage it has guaranteed to clients.

End Users

End users are entities that use recovered material as a feedstock in manufacturing new products and packaging. They purchase material processed to their own specifications. The end user may be under contract directly with the generator (such as a local government), with the processor, or with a dealer or broker. Most end users deal only in truckload quantities of at least 35,000 pounds. That means smaller generators (such as state agencies) are unlikely to deal with end users directly, unless they have a consistently high-quality material.

Local Specialty Entrepreneurs

Local specialty entrepreneurs are small-scale end users that provide an alternative use for material such as a company that makes building insulation from old newspapers or decorative tiles from recovered glass. While specialty entrepreneurs may be local, allowing for less costly shipping and the employment of the local community, they are unable to accept large or consistent quantities of material.

Overseas Markets

Overseas markets play an important role in the worldwide recovered material economy. The advantage to using export markets is that, in many cases, they: 1) pay the highest prices; 2) may accept material that does not have stable U.S. markets; or 3) take lower-quality material because they have laborers to sort.

However, doing business directly with an overseas market can pose challenges. It is hard to check references on overseas companies to verify if you are in fact negotiating with an end user as opposed to a broker. Even more impactful, some countries have begun banning the import of certain material so these markets are quickly disappearing abroad.

State Contracts

For some recovered material, the state has negotiated contracts with specific markets. These contracts must be used by state agencies and public colleges/universities.

Private colleges/universities as well as public schools and school districts that have adopted the state's procurement code in its entirety also must use these contracts, while others may choose to use them. The S.C. State Fiscal Accountability Authority administers all state contracts. Information technology contracts are administered by the Information Technology Management Office. Contracts for goods and services are administered by the Procurement Services Office.

Definitions

In the recycling industry, many refer to "contaminants" as material that should not be included in the recycling stream. Other terms, "outthrows" and "prohibitives" are also used.

- **OUTTHROWS:** Material that would generally be acceptable as commodities within the bale type, except that they have been treated such that they are unsuitable. An example would be soiled paper or UV-damaged plastics.
- **PROHIBITIVES:** Material that, if included in the bale type over a certain level, will make the material type unusable and damaging to processing equipment. For example, ceramics in glass or colored HDPE in natural HDPE bales.

Assessing Market Potential

In order to assess the options and negotiate the best marketing arrangement for a specific state agency, the recycling coordinator should first engage in an examination of the recycling program's goals and resources in terms of the available potential markets.

Strategies for Marketing Material

Marketing recovered material is a task that is different from most functions of state agencies. Instead of being the purchasers of goods, they are the sellers. Some of the strategies used to market material are described below.

- **Secure Movement:** If a recycling program is most concerned with always having a market, even when prices for recycled material spike downward, the tendency is to accept a low price or sometimes no price, in exchange for always being able to move material to market. Secure movement is a particularly tempting strategy for state agencies, as they typically lack ample storage space. If an agency is accepting a low price or no price for their commodity, it can be tempting to lower processing standards, as the material is moving anyway. This, however, can backfire if material becomes so contaminated there is no outlet that will accept it.
- **Price:** While obtaining a high price is considered a good outcome for sellers of commodities, always "chasing the highest price" may not be the best strategy. Selling material at a higher price can work well when there is a shortage of recovered material. Chasing the highest price can be problematic,

What factors help determine commodity price?

- **Quality** (e.g., minimal contamination, tight, consistent bales)
- **Volume** (e.g., full truck loads, consistent supply)
- **Location** (e.g., proximity to market)
- **Competition** (e.g., particularly demand in closer proximity to end market)
- **Demand** (driven by the need for end products)
- **Price of Alternatives** (e.g., as the cost of virgin material increases, manufacturers are willing to pay more for recovered material)

however, when it prohibits establishing long-term relationships with end markets and causes an agency's material to pile up.

- **Revenue and Value:** The marketplace is designed to reward value with revenue as long as the recycling coordinator knows how to balance secure movement and price. Most successful recycling programs share the revenue from their recyclables with the processor and pay the processor a fee that covers the fixed costs of the facility operation. While some recycling coordinators operate under the assumption that they are giving their processors an advantage by allowing them to keep all of the revenue from the sale of material, most private service providers with recycling experience encourage agencies to keep most of the revenue. This way, both parties incur market risks, lending to a balanced partnership. For further information on how sharing revenue benefits agencies and processors, see Why share revenue? below.
- **Long-term Contracts vs. Spot Markets:** Generally, smaller programs are more vulnerable in using spot markets, but their smaller volume of material may make long-term contracts unfeasible. State agency recycling coordinators who are managing smaller programs can benefit from using a few markets on a consistent basis, if possible, rather than relying on just one or choosing a new market every month. Larger programs with consistently high tonnages will benefit more from long-term contracts, but those with

Why share revenue?

- If a state agency pays a processing cost, sharing revenue with the processor generally results in a lower processing cost.
- It provides incentive for the processor to maximize tonnages recovered and sold.
- It provides incentive for the marketer to obtain the highest market price possible.
- It may provide incentive for including additional materials in the recycling program in the future.
- It encourages the processor to meet reporting requirements.
- Both parties share the risk during poor market times.
- It encourages agencies to engage in education and outreach activities.

larger volumes also can sell some material in the spot market.

- **Cooperative Marketing:** Cooperative marketing can be particularly beneficial for state agencies that generate relatively small quantities of material, as buyers typically prefer to purchase full truckloads and sellers receive more favorable pricing for full truckloads. Cooperative marketing can be as simple as staying in touch by phone with a nearby state agency and sharing a market pick-up with them. On the other hand, it can be as complex as a membership organization that assists smaller agencies with all aspects of marketing, from quality control to negotiating prices.

Resources for Identifying Markets

- **The S.C. Recycling Market Development Advisory Council (RMDAC):** RMDAC supports the economic growth of South Carolina's recycling industry by working to build and sustain markets as well as increase material recovery. RMDAC, which consists of 14 members appointed by the Governor representing industry, local governments, higher education and the public, makes recycling markets recommendations to the Governor and General Assembly each year.
- **The Green Resource Index (Index):** This publication, provided by the Office, helps state agencies, local governments, businesses and others locate markets for recovered material and offers a listing of companies that provide recycling equipment, products and services. Please visit www.scdhec.gov/library/OR-1403.pdf to view the Index.

Did You Know?

The Office subscribes to a commodity pricing service at www.recyclingmarkets.net.

The Office has access through this service to both historical and current market prices for a wide variety of recovered materials.

Market updates are provided by email twice a month to recycling professionals by the Office. Please call 1-800-768-7348 to be added to the email list.

A Materials Exchange

- **Southeastern Waste Information Exchange (SWIX):** Recycling professionals can access a number of regional and national material exchanges to assist in finding markets or alternative uses for recovered material. This can be material typically included in a recycling program, one-time specially generated material and difficult-to-manage material. This is a useful tool for state agency recycling professionals seeking markets for industrially generated material that may not be found in the residential waste stream. Visit www.wastexchange.org for more information.

Additional Resources for Finding Markets

- Association of Plastic Recyclers (APR), www.plasticsrecycling.org
- Glass Packaging Institute, Cullet Processors, www.gpi.org/recycling/where-recycle
- Steel Recycling Institute, Steel Recyclers, www.steelsustainability.org

References & Resources for Chapter 1

- Association of Plastic Recyclers (APR), www.plasticsrecycling.org
- DHEC, The Green Resource Index, www.scdhec.gov/library/OR-1403.pdf
- EPA, Resource Management, www.epa.gov/smm
- EPA, SMM Web Academy – How to Negotiate Your Contract with Waste Haulers, <https://archive.epa.gov/smm/web-academy/web/html/may12.html>
- Glass Packaging Institute, Cullet Processors, www.gpi.org/recycling/where-recycle
- Institute of Scrap Recycling Industries, Inc., www.isri.org
- National Association for PET Container Resources (NAPCOR), www.napcor.com
- NAPCOR, Reports & Resources, napcor.com/reports-resources/
- Recyclingmarkets.net Commodity Pricing Service, recyclingmarkets.net
- R.W. Beck (for PA DEP), "Effective Contracting for Recycling Programs," (Training Session), April 2006
- S.C. State Fiscal Accountability Authority, Procurement Services, www.procurement.sc.gov/PS/PS-index.phtml
- Steel Recycling Institute, www.steelsustainability.org

Environmentally Preferred Purchasing

CHAPTER 2

What is environmentally preferred purchasing?

Environmentally preferred purchasing (EPP) – also known as green purchasing – is the procurement of products and services that have a lesser or reduced effect on human health and the environment when compared with competing products and services that serve the same purpose. This comparison may consider raw material acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance and disposal of the product or service. EPP emphasizes purchasing products that:

- Use less water and energy to manufacture;
- Conserve resources;
- Reduce pollution;
- Are less toxic (protecting the health and safety of agency staff and visitors) and minimize harmful emissions;
- Are designed to last;
- Are reusable (reducing waste).

Buying products that can be recycled and recycled-content products is a basic part of any green purchasing program. Completing the recycling loop sustains markets for recycled material, stimulates the development of environmentally friendly products and creates green jobs. **State agencies have a unique opportunity with their collective purchasing power to protect human health and the environment as well as have a significant influence on the success and growth of green products and services.**

Recycling only works when consumers, businesses and organizations buy products made with recycled material.



More to Know

Below are additional resources available from the U.S. Environmental Protection Agency (EPA) and others to identify environmentally preferable products.

- Conservatree (provides links to manufacturers of recycled-content paper products), <http://conservatree.org/>
- EPA, Comprehensive Procurement Guidelines Directory, www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program
- EPA, Green Purchasing Guides (includes specific guides for office supplies, cleaning products, copiers, conferences, carpet and additional guidance documents for implementing EPP), www.epa.gov/greenerproducts
- National Association of State Procurement Officials (offers a comprehensive guide on EPP including the concept and benefits of green purchasing, recommended steps and proven steps on the implementation of a green purchasing program and links to other resources), www.naspo.org/green/index.html#sectiontwo
- S.C. State Fiscal Accountability Authority, Procurement Services, (provides the "State of South Carolina Guide for Recycled Products"), www.procurement.sc.gov

Setting Up a Green Purchasing Program

Green purchasing is a new practice for some state agencies and an ongoing commitment for others. It requires some planning and attention, but green purchasing is not difficult. Below are five steps for buying products/services that support the environment.

1. **Make a commitment to purchase products made from recycled material.** When considering green purchasing policies and decisions, work with administrators and focus on South Carolina state agencies' goal of purchasing 25 percent recycled-content products as established in The S.C. Solid Waste Policy and Management Act of 1991 (Act). Also, be aware of South Carolina's EPP Policy. (See References section at the end of this supplement for the complete S.C. Environmentally Preferred

Purchasing Policy.) Consider encouraging your agency to establish an EPP-related goal if it has not yet done so. It's important to remember that buying recycled-content products creates a market for the material state agencies divert.

25%

2. **Review all purchasing practices.** Staff from different departments can help purchasers understand their needs and constraints. Conduct an assessment of purchases. Which are recycled-content products? Which products are not, but could be? Which services have established environmentally friendly practices? Which products and their packaging are recyclable at the end of their useful lives and could be included in existing recycling programs?
3. **Examine product specifications to see if they could hinder the buying of recycled-content/recyclable products.** If they do, determine if the specifications can be adjusted to allow for the purchase of recycled-content products while still meeting the state agency's needs. Look for clauses that restrict the use of recycled material such as "virgin only" or "recycled material prohibited."
4. **Determine the availability of green products and services that meet specifications.** There are many resources available to identify recycled-content products and eco-friendly services, including EPA and the S.C. Department of Health and Environmental Control's Office of Solid Waste Reduction and Recycling (Office). See More to Know on the previous page. Also consider asking existing suppliers about green alternatives – they often have options for interested customers.
5. **Buy green.** If the commitment is there, state agencies can implement an EPP program, one product or service at a time. To make the program as successful as possible, do the following.
 - **Use common definitions and standards.** For example, if the industry standard is 50 percent post-consumer content for a product, don't ask for a higher standard. Many purchasing agents use definitions and minimum-content standards established by EPA's Comprehensive Procurement Guideline program. More information can be found in the box on the left.
 - **Talk to your vendors.** Tell vendors you wish to purchase environmentally friendly products and services (e.g., paper, printing, construction and

The Comprehensive Procurement Guideline Program

The Comprehensive Procurement Guideline (CPG) program is part of EPA's continuing effort to promote the use of recycled material.

The CPG designates items in the following eight product categories:

1. **Paper;**
2. **Automotive;**
3. **Construction;**
4. **Transportation;**
5. **Park and recreation;**
6. **Landscaping;**
7. **Non-paper office supplies; and**
8. **Miscellaneous.**

Under the Resource Conservation and Recovery Act, the requirement to purchase an EPA-designated product containing recovered material applies to "procuring agencies" that spend more than \$10,000 a year on that item.

Procuring agencies include all federal, state and local agencies or government contractors that use appropriated federal funds.

For more information on CPG, visit www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

demolition, caterers, event staff, landscaping, maintenance). Ask to be kept informed about future green developments. The range of products and services available will likely increase as demand grows. The S.C. State Fiscal Accountability Authority's Office of Procurement Services maintains the State of S.C. Guide for Recycled Products at www.procurement.sc.gov.

- **Include a certification clause.** Most purchasing departments require vendors to certify minimum recycled-content. You may wish to use a certification clause provided by the manufacturer.

There may be obstacles to overcome in implementing a green purchasing program. For example:

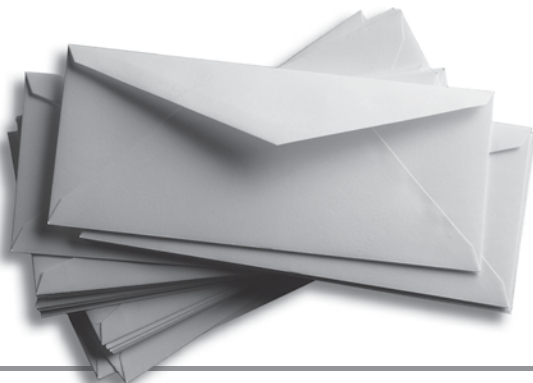
- **Recycled-content products may cost more than virgin-material products;**
- **Environmentally friendly services may cost more than standard services; and**
- **Some staff may resist change,** particularly if they have strong relationships with vendors.

Definitions

When buying recycled-content products, two terms are frequently used: **POST-CONSUMER** and **PRE-CONSUMER**.

- **POST-CONSUMER** is material that comes from products used by consumers and collected for recycling.
- **PRE-CONSUMER** is material that is not used by consumers, but rather collected as a waste material during manufacturing (e.g., paper trimmings at a paper mill).

Choosing products with a higher content of **post-consumer** material helps sustain local recycling programs.



Be realistic and patient. Promoting efforts and successes will also help encourage others to seek greener options.

Non-Environmental Factors to Consider When Selecting Products & Services

There are three non-environmental considerations to keep in mind when going green – availability, quality and cost. Procurement departments should examine these issues before making a purchase.

- **Availability:** There has been a dramatic growth in the availability of green products and services in recent years. Some of these, however, only are available in certain regions. To ensure adequate supply is available, it may be helpful to:
 - **Allow ample lead time when ordering products;**
 - **Establish a service contract;**
 - **Find out who the vendors are for green products and services for other state agencies in your region; and**
 - **Look for well-established vendors.**
- **Quality:** Don't be put off by the misconception that recycled-content products and green services are inferior. Increased demand and changes in technology have resulted in improved products and services that are competitive with their standard counterparts.

South Carolina's EPP Policy

The state's EPP policy – developed by the Office, the S.C. State Fiscal Accountability Authority's Procurement Services Office and others – was officially unveiled in October 2009.



The mission of the policy is to reduce the environmental and human health impacts of state government and publicly funded college/university operations by integrating environmental considerations into their procurement processes.

The entire policy is provided in the Resources Section of this supplement.

For more information on the S.C. Green Purchasing Initiative, visit <http://procurement.sc.gov>.

- **Cost:** Recycled-content products may cost more than comparable virgin products with cost differentials varying by type, region and market conditions. Even with higher costs, many state agencies recognize the need to purchase recycled-content products and do so via preferential purchasing mechanisms. In some cases, not only is the purchasing price important, but also the life-cycle cost. Some recycled-content products may have lower maintenance costs over time, which can offset higher initial costs, resulting in a lower life-cycle cost. The following tools may encourage enhanced EPP programs:



- **Price Preferences** allow for the purchase of green products and services even if they are more expensive than comparable options. **In South Carolina there is a 7.5 percent price preference as designated by the Act.** When comparing prices of products and services to prices of green alternatives to determine the lowest bid, competing products must have 7.5 percent added to their bid prices (new price = bid price times 1.075).
- **Dual Track Bids** allow bids from vendors offering recycled-content products and those offering virgin-material products.

7.5%

- **Approved Vendors** allow individual departments and offices a choice in meeting their product needs.



Tracking & Promoting Success

To enhance EPP programs, state agency procurement officials and recycling professionals might consider the following.

- **Conduct a survey** to identify and overcome any problems with quality, delivery, etc.
- **Monitor market developments** by staying in contact with suppliers, state and local purchasing and recycling agencies by reviewing trade publications.
- **Inform buyers and staff about the latest EPP products on the market** and any changes in regulations and specifications.
- **Conduct annual program reviews of the green purchasing program**, including information on purchases by grade, volume, price and availability. Reassess goals periodically, considering products and services that may have become available recently.
- **Let agency administrators and other state agencies know about the success of your EPP program.**

As your agency makes headway in increasing EPP efforts, it is important to establish a recordkeeping and evaluation system. This will help to track the success of your program and share the results.

FIGURE 2.1: Price Preference Pen Test

PEN A	PEN B
	
The Cheapest, Low-Quantity Ballpoint Pen with STANDARD Content	The Cheapest, Low-Quantity Ballpoint Pen with RECYCLED Content
\$1.31 Per 12-Pack	\$1.39 Per 12-Pack
$\$1.31 \times 1.075 = \1.40825 <p>Since the recycled-content pens are less than the standard pens + the 7.5 percent price difference, the EPP Policy indicates that the recycled-content pens should be the ones purchased.</p>	

This also will allow you to:

- **Justify and promote the program to staff, administrators and the public;** and
- **Evaluate the program, correct problems and make changes and improvements.**

Set up a method to designate green purchases in your system. (A separate code number or other distinction will suffice.)

Worksheets outlining two ways to track the information are provided in the Resources section at the end of this guide.

Encourage your procurement department or your own department to promote EPP. Consider:

- **Including statements** such as "Printed on Recycled Paper," where appropriate;
- **Putting announcements on bulletin boards and in newsletters** regarding recycled-content product usage; and
- **Including references to the buy-recycled program in media advertising.**

References & Resources for Chapter 2

- City of Minneapolis, "Environmentally Preferable Purchasing Policy, www.minneapolismn.gov/www/groups/public/@finance/documents/webcontent/wcms1q-003461.doc
- Conservatree, www.conservatree.org
- EnergyStar, www.energystar.gov
- EPA, Comprehensive Procurement Guideline Program, www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program
- EPA, Greener Products and Services, www.epa.gov/greenerproducts
- National Association of State Purchasing Officials (NASPO), Green Purchasing Guide, www.naspo.org/green/
- Responsible Purchasing Network, www.responsiblepurchasing.org
- S.C. Environmentally Preferred Procurement Policy, procurement.sc.gov/files/2009-1.pdf
- S.C. Green Purchasing Initiative, procurement.sc.gov/agency/green-purchasing
- S.C. Solid Waste Policy and Management Act of 1991, www.scstatehouse.gov/code/t44c096.php

Chapter 2 Notes

[illegible]

Resources

S.C. Environmentally Preferred Purchasing Policy

STATEMENT OF POLICY

South Carolina state government seeks to further reduce the environmental and human health impacts of its operations by integrating environmental considerations into its procurement process.

South Carolina state government is committed to environmentally preferred purchasing in recognition of the need to more efficiently use natural resources, reduce waste, save money, sustain markets for materials collected in recycling programs and protect South Carolina's environment, economy and the quality of life of all its citizens.

Therefore it is the policy of the state of South Carolina to endeavor to:

- **Improve or implement green purchasing practices** that reduce waste and result in the purchase of fewer products, when practicable and cost effective, without reducing the safety or quality of the products;
- **Make purchasing decisions with the understanding and consideration of the environmental impact** and life cycle cost of a product or service during its manufacture, transport, use and end-of-life management;
- **Identify and purchase products and services** that prevent pollution, eliminate or reduce toxins, conserve energy and water, contain recycled-content material and minimize environmental impacts; and
- **Purchase from South Carolina businesses** to minimize transportation costs and emissions, when it can be done with adequate competition and without compromise of performance or quality of products or services.

This Policy applies to all South Carolina state agencies and publicly funded colleges and universities and others defined as governmental bodies per SC Code Section 11-35-310(18) (www.scstatehouse.gov/code/t11c035.php). Vendors, contractors and grantees will comply with applicable sections of this policy for products and services that are provided to the state of South Carolina. All purchases under this policy are subject to local, state or federal requirements as applicable. Nothing in this policy should be construed as requiring a state agency or publicly funded college or university to procure products that do not perform according to their intended use or reduce safety, quality, or effectiveness.

The following Standards are provided as a guide to implementing this policy. Policy effective date: October 15, 2009

STANDARDS

These standards have been adopted to assist purchasers in fulfilling their obligations of this policy. The standards listed below should not be considered a complete list. Purchasers are encouraged to go beyond these standards.

1. SOURCE REDUCTION

- 1.1 Purchase products that are durable, long lasting, reusable or refillable.
- 1.2 Purchase remanufactured products such as toner cartridges, tires, furniture, equipment and automotive parts, but without reducing safety, quality, effectiveness or the warranty that supports the original product.

- 1.3 Consider short-term and long-term costs in comparing product choices. This includes an evaluation of the total costs expected during the time the product is owned including, but not limited to, acquisition, extended warranties, operation, supplies, maintenance, and end of life management.
- 1.4 Request vendors to reduce packaging or use the minimum amount necessary for product protection.
- 1.5 Request vendors that cannot eliminate packaging to use packaging that is reusable, recyclable or able to be composted in existing recycling programs.
- 1.6 Assign high priority to products that are manufactured by companies that take financial and/or physical responsibility for collecting, recycling or, reusing as well as safely managing their products and packaging at the end of their useful life.
- 1.7 Request vendors to provide information on the manufacturer's recycling services when products are available that have established manufacturer-financed recycling programs.
- 1.8 Require that surplus or outdated electronic equipment, including but not limited to, computers, monitors, printers and copiers, be designated for reuse or recycled under the requirements of the state contract for managing electronic equipment.
- 1.9 Consider leasing Information Technology equipment (i.e. computer hardware, printers, mail machines) under the requirements of the state term contract for equipment recycling.

2. RECYCLED-CONTENT PRODUCTS

- 2.1 Apply, as a general rule, the 7.5 percent price preference for purchasing recycled-content products (S.C. Solid Waste Policy and Management Act of 1991, Section 44-96-140 www.scstatehouse.gov/code/t44c096.php). The state has a goal that of all products purchased, at least twenty-five percent (25%) will contain recycled-content materials.
- 2.2 Specify and purchase products that contain the highest percentage of post-consumer recycled content practicable, but no less than the minimum recycled-content standards established by the U.S. Environmental Protection Agency (EPA) through its Comprehensive Procurement Guidelines. (www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program).
- 2.3 Specify and purchase products compliant with the recycled product specifications listed in the State of SC Guide for Recycled Products. (www.procurement.sc.gov/files/RecycleGuide.doc).
- 2.4 Specify that all printed materials (e.g., reports, brochures, letters, forms, business cards) that are purchased or produced must be printed on recycled-content paper and contain a statement on the material that the paper contains recycled content. The statement also should indicate the percentage of post-consumer recycled content it contains.
- 2.5 Specify and purchase recycled-content transportation products such as signs, traffic cones, barricades, parking stops and delineators.
- 2.6 Specify the use of recycled, reusable or reground materials for paved construction projects.

3. ENERGY AND WATER SAVINGS

- 3.1 Purchase energy-efficient equipment with the most up-to-date, economically feasible and proven energy efficiency functions. This includes, but is not limited to, high-efficiency heating and cooling equipment, high efficiency motors and equipment controls.
- 3.2 Purchase appliances and equipment that meets or exceeds EPA's Energy Star standards and have the Energy Star label (www.energystar.gov).
- 3.3 Replace non-energy efficient lighting; including interior and exterior lighting, street lighting and traffic signal lights with energy-efficient equipment and bulbs.
- 3.4 Replace, as required by law (S.C. Energy Efficiency Act, Section 48-52-640), incandescent light bulbs with compact fluorescent bulbs when the incandescent bulb needs to be replaced.
- 3.5 Purchase water-saving products, including but not limited to, high-performance fixtures like low-flow toilets, waterless urinals, tankless water heaters, low-flow faucets and aerators as well as faucets with motion-activated sensors. When possible, purchase products receiving EPA's WaterSense designation (www.epa.gov/watersense).

4. POLLUTION PREVENTION AND TOXICS REDUCTION

- 4.1 When making a choice among comparable products, purchase products whose production and use involve fewer hazardous materials.
- 4.2 Purchase cleaning products that meet the Green Seal certification (www.greenseal.org). Require vendors to adopt green cleaning practices.
- 4.3 Require that all surfactants and detergents be biodegradable and not contain phosphates.
- 4.4 Purchase building products, such as paint, carpet, adhesives, furniture and casework, with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no urea formaldehyde.
- 4.5 Purchase paper products that are unbleached or that are processed without chlorine or chlorine derivatives.
- 4.6 Purchase soy-based ink for printing. Include the use of soy-based ink in printing contracts.
- 4.7 Do not purchase products that use polyvinyl chloride (PVC) such as, but not limited to, office binders, furniture, flooring and medical supplies.
- 4.8 Purchase rechargeable instead of single use batteries.
- 4.9 Specify that desktop computers, notebooks and monitors purchased or leased meet, at a minimum, the bronze standard of the Electronic Product Environmental Assessment Tool (EPEAT) environmental criteria (www.epeat.net).
- 4.10 Purchase replacement vehicles as required by S.C. Code Section 1-11-310 (www.scstatehouse.gov/code/t01c011.php), that are less-polluting alternatives and cleaner operating models such as hybrid, bio-diesel, hydrogen, fuel cell, or flex-fuel vehicles and encourage and track the use of alternative fuels.
- 4.11 As a practice in Integrated Pest Management, purchase chemical controls only as a last resort. Purchase and use pesticides only after monitoring indicates they are needed and treatments are designed with the goal of removing only the target organism.

5. GREEN BUILDING CONSTRUCTION AND LEASING

- 5.1 Follow Green Building Practices for design, construction, and operation of all new building projects and renovations. Specific building projects identified in the S.C. Energy Independence and Sustainable Construction Act of 2007, Section 48-52-830, (www.scstatehouse.gov/code/t48c052.php) shall be constructed in accordance with either the U.S. Green Building Council (USGBC, <https://new.usgbc.org/>) LEED standard or the Green Globes Rating System (www.greenglobes.com).
- 5.2 When building and leasing, consider the use of on-site renewable energy such as solar, wind, geothermal and biomass to reduce impacts of fossil fuel use.
- 5.3 Consider deconstruction and re-use of materials or purchase previously used or salvaged building materials to reduce waste and the need for virgin materials.
- 5.4 Reduce the depletion of finite raw materials by using rapidly renewable materials such as bamboo, wool, cotton, linoleum and cork.
- 5.5 Maximize the use of natural lighting in buildings to avoid the use of artificial lighting.
- 5.6 When building and leasing, develop a plan for measurement of building water and energy consumption to provide ongoing accountability of actual usage.
- 5.7 When leasing office space, negotiate with leaser for renovations to install high efficiency lighting, lighting and other equipment controls and water sensors. Then, seek reduction in utility allowance.
- 5.8 Lease buildings with provided recycling services; energy efficient and water saving fixtures; green cleaning practices; and that use green landscaping techniques.
- 5.9 When renovating space, plan for flexibility and future change by using easily moved walls, outlets, etc.

6. GREEN LANDSCAPING

- 6.1 Purchase environmentally friendly landscape services that includes design, construction, renovation and maintenance. These services may include grasscycling, composting and the reduction of hazardous products.
- 6.2 Purchase recycled-content materials when constructing hardscape and landscape structures.
- 6.3 Reduce water used for irrigation by purchasing plants that are native to the area where they are planted and drought-tolerant plants that require minimal or no watering once established.
- 6.4 Reduce water pollution and heat-island effect by reducing the amount of impervious surfaces in the landscape. Permeable substitutes such as pervious concrete or pavers are preferred for walkways, patios, driveways and low-volume traffic areas.
- 6.5 Reduce light pollution by only lighting areas to the level required for safety and comfort.

7. GREEN TRAVEL AND MEETINGS

- 7.1 Consider green hotels when making reservations.
- 7.2 Purchase environmentally friendly conference and workshop services including meeting facilities and catering.
- 7.3 Host and attend Webinars and teleconferencing in place of workshops and conferences.
- 7.4 When using a State car or being reimbursed for mileage for travel, consider carpooling to help reduce gas usage and emissions.

8. END-OF-LIFE MANAGEMENT

- 8.1 Require that all surplus or outdated equipment/facilities/materials be identified as surplus and, under S.C. Regulation 19-445.2150, be considered to have remaining useful life and available for disposal.
- 8.2 Focus on in-state reuse by State agencies, towns, municipalities and other state supported agencies to avoid duplicate procurement and encourage reuse of resources throughout every level of state government.
- 8.3 Preplan projects with one-time contracting to remove items considered surplus property and deliver to other state agencies or sell to the general public.
- 8.4 Consider buying material that at the end-of-life can be reutilized as-is or recycled, such as aluminum signs, metal fencing, and metal shelving.

9. IMPLEMENTATION

- 9.1 The S.C. Budget and Control Board's Materials Management Office (MMO) will oversee the statewide implementation of this policy.
- 9.2 MMO will, as required by law (S.C. Solid Waste Policy and Management Act of 1991, Section 44-96-140, (www.scstatehouse.gov/code/t44c096.php), maintain and update annually a list of products with recycled-content specifications (S.C. Recycled Products Guide). The S.C. Department of Health and Environmental Control's (DHEC) Office of Solid Waste Reduction and Recycling will assist MMO as needed with this requirement.
- 9.3 MMO will establish a Green Purchasing Workgroup of no less than seven members to be selected from state agencies as well as colleges and universities that will meet at least quarterly. The state's Chief Procurement Officer will chair the workgroup. The mission of the workgroup will be to enhance and facilitate the coordination and implementation of this policy. Specifically, the workgroup will:
 - 9.3.1 Identify immediate priorities, establish a process for identifying additional priorities and set deadlines for implementation;
 - 9.3.2 Develop and implement an education and outreach program on this policy that may include workshops, conferences, training, media events and electronic newsletters.
 - 9.3.3 Research and recommend recycled-content products for consideration on state contracts;
 - 9.3.4 Review, research and make recommendations for updates to the S.C. Recycled Products Guide;
 - 9.3.5 Develop, implement and assist state agencies and colleges and universities in tracking their green purchasing progress; and
 - 9.3.6 Review and revise (if necessary) the standards of this policy on at least an annual basis.
- 9.4 All state agencies, including colleges and universities, are required to provide a Green Purchasing Initiative" contact to MMO to assist with the implementation of this policy.
- 9.5 All state agencies, including colleges and universities, are required by law (S.C. Solid Waste Policy and Management Act of 1991, Section 44-96-140, (www.scstatehouse.gov/code/t44c096.php) to report their recycled-content purchases annually by September 15th to DHEC's Office of Solid Waste Reduction and Recycling (Office). The Office will then compile

the information that is reported and publish an annual report on the state's overall progress.

- 9.6 Upon request, buyers making the selection from competitive bids should be able to provide justification for product choices that do not meet the environmentally preferable purchasing criteria in this policy. Suggested revised language: Purchasers should be able to provide justification for product choices that do not meet the environmentally preferable purchasing criteria in this policy.

10. DEFINITIONS

- 10.1 BIODEGRADABLE: Capable of being broken down by microorganisms into simple, stable compounds such as carbon dioxide and water.
- 10.2 COMPOST: The product resulting from the decomposition of organic materials such as yard trimmings and food scraps.
- 10.3 COMPOSTING: The conversion of organic material to compost by microorganisms. Composting is an effective solid waste management method for reducing the organic portion of garbage including yard trimmings, leaves and food scraps.
- 10.4 COMPREHENSIVE PROCUREMENT GUIDELINES (CPG): The guidelines established by the U.S. Environmental Protection Agency (EPA) CPG program that promotes the use of materials recovered from solid waste. One key component of the program is EPA's list of designated products with recycled-content recommendations. Products are grouped into eight categories: construction; landscaping; non-paper office; paper and paper products; park and recreation; transportation, vehicles and miscellaneous.
- 10.5 ELECTRONIC PRODUCT ENVIRONMENTAL ASSESSMENT TOOL (EPEAT): A procurement tool to help institutional purchasers in the public and private sectors evaluate, compare and select desktop computers, notebooks and monitors based on their environmental attributes.
- 10.6 ENERGY STAR: EPA's energy efficiency product labeling program.
- 10.7 ENERGY EFFICIENT: A product that is in the upper 25 percent of energy efficiency for all similar products, or that is at least 10 percent more efficient than the minimum level that meets Federal standards.
- 10.8 ENVIRONMENTAL PERFORMANCE: Considerations include the use of renewable resources, improved energy and water efficiency, the reduction of air contaminants and greenhouse gas emissions, waste reduction, increased reuse and recycling, and the reduction of hazardous waste and toxic pollutants.
- 10.9 ENVIRONMENTALLY PREFERRED: Products and services that have a lesser or reduced effect on human health and the environment over the life cycle of the products and services when compared with competing products or services that serve the same purpose. This comparison applies to the acquisition of raw materials, manufacturing, packaging, distribution, use, reuse, operation, maintenance and end-of-life management.
- 10.10 GREEN BUILDING PRACTICES: A whole-systems approach to the design, construction, and operation of buildings and structures that help mitigate the environmental, economic, and social impacts of construction, demolition, and renovation. Green Building Practices such as those described in the LEEDTM Rating System, recognize the relationship between natural and built environments and seeks to minimize the use of energy, water, and other natural resources and provide a healthy productive environment.
- 10.11 GREEN GLOBES: Green Globes is a Green Building Rating System for new and existing buildings used in Canada and the USA. In the

USA, Green Globes is owned and operated by the Green Building Initiative (OBI).

- 10.12 **GREEN SEAL:** An independent, non-profit environmental labeling organization. Green Seal standards for products and services meet the U.S. EPA's criteria for third-party certifiers. The Green Seal is a registered certification mark that may appear only on certified products
- 10.13 **HARDSCAPE:** Part of a building's grounds made with hard materials such as patios, retaining walls, and walkways.
- 10.14 **HEAT-ISLAND EFFECT:** Warmer temperatures in urban areas compared to adjacent rural area as a result of solar energy retention on constructed surfaces such as streets, sidewalks, parking lots and buildings.
- 10.15 **IMPERVIOUS:** Surfaces that do not permit the penetration or passage of liquids.
- 10.16 **INTEGRATED PEST MANAGEMENT (IPM):** An ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.
- 10.17 **LEED:** Leadership in Energy and Environmental Design is a Green Building Rating System established by the U.S. Green Building Council and designed for rating new and existing commercial and residential buildings and community developments.
- 10.18 **LIFE-CYCLE COSTS ANALYSIS:** The study of the costs associated with a product throughout its life cycle - from acquisition to its end-of-life management.
- 10.19 **PERMEABLE:** The permitting of liquids to pass through.
- 10.20 **POST-CONSUMER MATERIAL:** A finished material which would normally be disposed of as a solid waste, having reached its intended end-use and completed its life cycle as a consumer item, and does not include manufacturing or converting wastes.
- 10.21 **PRE-CONSUMER MATERIAL:** Material or by-products generated during or after manufacture of a product is completed but before the product reaches the end-use consumer. Pre-consumer material does not include mill and manufacturing trim, scrap, or broke which is generated at a manufacturing site and commonly reused on-site in the same or another manufacturing process.
- 10.22 **PRODUCER RESPONSIBILITY:** An environmental strategy in which producers assume financial and/or physical responsibility for the management of post-consumer products so that those who produce and use those products bear the costs of recycling and proper disposal.
- 10.23 **RECOVERED MATERIAL:** Fragments of products or finished products of a manufacturing process, which has converted a resource into a commodity of real economic value, and includes pre-consumer and post-consumer material but does not include excess resources of the manufacturing process.
- 10.24 **RECYCLED CONTENT:** The percentage of recovered material, including pre-consumer and post-consumer materials, in a product

that otherwise would have been discarded. Recovered material that would have been discarded that is used in a product. Recycled content material can be pre-consumer or post-consumer.

- 10.25 **REMANUFACTURED PRODUCT:** Any product diverted from the supply of discarded materials by refurbishing and marketing said product without substantial change to its original form.
- 10.26 **REUSED PRODUCT:** Any product designed to be used many times for the same or other purposes without additional processing except for specific requirements such as cleaning, painting or minor repairs.
- 10.27 **SOURCE REDUCTION:** Products that result in a net reduction in the generation of waste compared to their previous or alternate version and includes durable, reusable and remanufactured products; products with no, or reduced, toxic constituents; and products marketed with no, or reduced, packaging.
- 10.38 **S.C. RECYCLED PRODUCTS GUIDE:** A listing of products with recycled-content specifications.
- 10.39 **SURFACTANT:** An agent that, when dissolved in water, works to loosen dirt to allow cleaning agents better removal of dirt from surfaces.
- 10.40 **SUSTAINABLE:** The needs of the present are met without compromising the ability of future generations to meet their own needs.
- 10.41 **U.S. DEPARTMENT OF ENERGY (DOE):** A federal agency that promotes energy conservation.
- 10.42 **U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA):** A federal agency that leads the nation's environmental science, research, education and assessment efforts to protect human health and the environment.
- 10.43 **U.S. EPA GUIDELINES:** The Comprehensive Procurement Guidelines established by the U.S. Environmental Protection Agency for federal agency purchases as of May 2002 and any subsequent versions adopted.
- 10.44 **WATER-SAVING PRODUCTS:** Products that are in the upper 25 percent of water conservation for all similar products, or at least 10 percent more water conserving than the minimum level that meets the Federal standards.
- 10.45 **WATERSENSE:** A partnership program sponsored by the U.S. Environmental Protection Agency makes it easy for Americans to save water and protect the environment. Look for the WaterSense label to choose quality, water-efficient products.

11. SOURCES

- 11.1 City of Oakland, Environmentally Preferable Purchasing Policy
- 11.2 City of Seattle, Sustainable Purchasing Policy
- 11.3 Clemson University, Sustainable Procurement Policy
- 11.4 King County (Washington), Recycled Product Procurement Policy
- 11.5 Rutgers, The State University of New Jersey, Green Purchasing Guidelines Policy



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